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General Warnings

- Dangerous high voltage is present inside the unit and in the line power cord ends. Do not open the unit. Do not attempt to make any repairs.
- Do not operate the unit before it is completely assembled and mounted.
- Always use an electrical supply system that provides a separate ground conductor. Use a supply circuit that is protected by a certified ground fault circuit interrupter.
- You must read this manual and be professionally trained before operating this unit.

The **A1007** power inserter inserts DC power and (optionally) 10MHz reference signal to the IFL cable coming from the modem to the BUC or to other external unit.

It is connected in series between the IFL output of the modem and the IFL input of the BUC.

It is a 19" 2U unit, powered by the line power.

The **A1007** is an excellent solution in every case when the internal power supply of the modem is too small for the BUC or when the modem does not supply the 10MHz reference signal.

As a standard, the **A1007** has an internal IF Input 30dB Digital Controlled Attenuator (DCA) with a 2dB step, Controlled by a rotary switch on the back panel.

The **A1007** modular design enables several options in order to give a solution to various requirements. The options are summarized in the following table. See last page for ordering instructions.

Parameter	Option	Comments
Output Voltage	48V	Standard
	24V	
Output Power	350	Standard
	150	
IFL Input Connector	F type	Standard
	N type	
IFL Output Connector	N type	Standard
	F type	
10MHz Reference Source	Internal	TCXO, +/- 3PPM



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Front Panel

POWER SUPPLY – Indicates proper output voltage. Turns off when output voltage is below 46V (With standard 48V output voltage) or below 22V (With the 24V output voltage option)

LOW CURRENT – Indicates output current below 0.8A .

HIGH CURRENT – Indicates output current higher than 6A.

A1007 Power Inserter Front Panel



Back Panel

INPUT (from the modem) connector – F or N type

OUTPUT (to the BUC) connector – F or N type

AC INPUT – Line power inlet

ATT. – DCA control rotary switch

A1007 Power Inserter Back Panel



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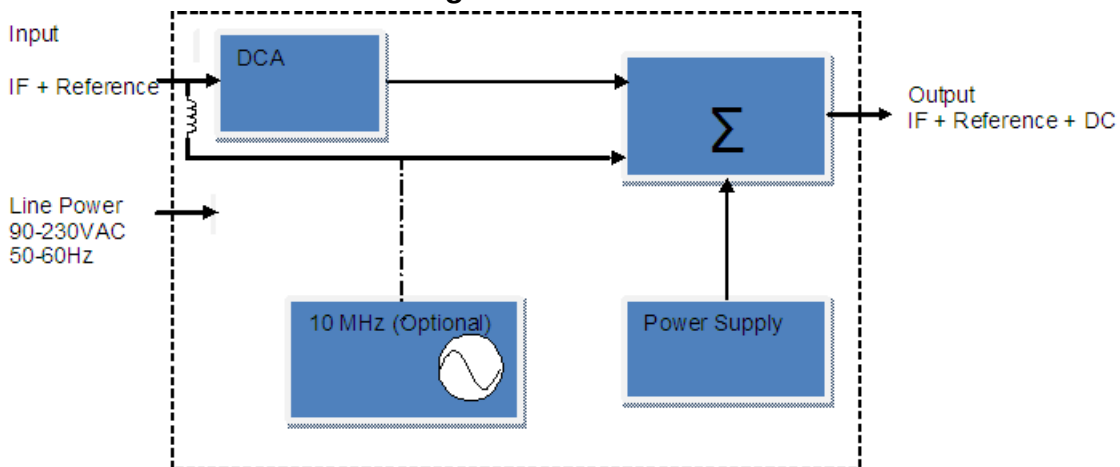
DCA control




Using a screwdriver, turn the rotary switch to the required attenuation, according to the table below:-

Digit	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Attenuation [dB]	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30

A1007 Power Inserter Block Diagram



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Electrical Parameters:

(Specifications are subject to change without prior notice)

IF Frequency Range:	950-1550 MHz
Reference Frequency	10 MHz
IF Insertion Loss	1.2dB (with DCA set to 0dB)
10 MHz Reference Insertion Loss	3dB
Power Supply	
AC Input Voltage	90-230V (Auto Ranging), 50-60Hz
DC Output Voltage	24 or 48V (Factory set)
DC Output Power	350 Watt (With standard 48V output) 150 Watt (With optional 24V output)
DCA	
DCA Range	0 to 30dB
DCA Step	16 step of 2dB
DCA control	Hexadecimal encoder (rotary switch) on back panel
Internal 10MHz Reference Oscillator (Optional)	
Output PWR	5 – 7dBm
Stability	±3 ppm
Accuracy	2 ppm
Phase noise @ 0.1KHz	120dBc/Hz
Phase noise @ 1KHz	130dBc/Hz
Phase noise @ 10KHz	140dBc/Hz
Temperature Range	
Operating	-10°C to +50°C
Storage	-30°C to +70°C
Relative Humidity	95%
Weight and Dimensions	
Weight	4.1 Kg
Dimensions (W, H, D)	Standard 19", Standard 2U, 320mm (12.6")

How to order:

A1007 – V – W – I – O – Options

Where:-

A1007 = Model Number, Always A1007

V= Output Voltage (24 for 24 Volt, 48 for 48 Volt)

W= Output Power (350 for 350 Watt, 150 for 150 Watt)

I= Input Connector (N for N type, F for F type)

O= Output Connector (N for N type, F for F type)

Options – (R for internal reference)

Example: **A1007-48-FN-350-D** (A1007 Power Inserter with 48V output voltage, 350W output power, F type input connector, N type output connector, internal 10MHz reference oscillator)

